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EXAMINER

DAO, THUY CHAN

ART UNIT	PAPER NUMBER
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2192

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/626,958

Applicant(s)

GRYKO ET AL.

Examiner

Thuy Dao

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) 6,19,27,39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-18,20-26,28-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the amendment filed on February 1, 2007.
2. Claims 1-5, 7-18, 20-26, and 28-38 have been examined.

Response to Amendments

3. Per Applicants' request, claims 22-26 and 28-33 have been amended and claims 6, 19, 27, and 39 have been canceled.
4. The objection to the specification is withdrawn in view of Applicants' amendments.
5. The 35 USC §112, second paragraph rejection over claims 6, 19, 27, 30, and 39 is withdrawn in view of Applicants' amendments.
6. The 35 USC §101 rejection over claims 22-33 is withdrawn in view of Applicants' amendments.

Response to Arguments

7. The Applicants are thanked for a thorough reply. Applicants' arguments have been fully considered. However, they are not persuasive.

a) 35 USC §102(a) rejection as being anticipated by Series60-C++ ("Introduction to Series 60 Applications for C++ Developers", Version 1.0, Nokia Corporation, August 2002), Remarks, pp. 10-11.

Claim 1 is the representative claim (Remarks, page 11, lines 23-26).

(i) The Applicants asserted, "...Series 60 for C++ neither discloses nor suggests 'starting said runtime environment in the hosting process'..." (Remarks, page 10, line 25-26).

The Applicants asserted, "And, as taught on page 6, section 2, of Series 60 for C++, the "Series 60 Platform is a complete smartphone reference design, including a host of wireless applications. The platform builds on the Symbian operating system (Symbian OS)." The OS 6.1 is part of the Series 60 Platform. Thus, it is not possible to start the Series 60 Platform in the Symbian OS 6.1" (Remarks, page 11, lines 7-11, emphasis added).

The examiner notes that the Applicants mischaracterize Series60-C++ (i.e., "The OS 6.1 is part of the Series 60 Platform").

In contrast, Series60-C++ discloses Series 60 Platform is embedded within Symbian operating system OS 6.1. For example, page 7, section 5.1.1 Build and Run from the Command Line, lines 13-15, "*Open a command prompt and change to the drive that contains The Series 60 SDK. Navigate to the folder that contains the project code, e.g.,*

\Symbian\6.1\Series60\Epoc32Ex\Basics\HelloWorld (page 7, line 16, emphasis added);

\Symbian\6.1\Series60\Epoc32\Release\wins\udeb (page 7, line 30, emphasis added);

Furthermore, the examiner respectfully disagrees with Applicants' assertions. As set forth in the previous Office Action mailed November 1, 2006 (paragraph 12, pp. 4-5) and as explicitly disclosed above, Series 60 Platform includes a host of wireless applications and builds on the Symbian operating system OS 6.1 (emphasis added). When the Series 60 Platform (a runtime environment) is started, it means starting said runtime environment (Series 60 Platform) in the hosting environment (Symbian operating system OS 6.1).

(ii) The Applicants asserted, "*Series 60 for C++ neither discloses nor suggest 'attaching a debugger to said hosting process' ... Further, Applicant could find no portion of Series 60 for C++ that teaches attaching a debugger to the Symbian OS 6.1*" (Remarks, page 11, line 12-19).

As set forth in the previous Office Action (paragraph 12, pp. 4-5), Series 60-C++ discloses starting said runtime environment (Series 60 Platform) in the hosting process (Symbian OS 6.1), wherein said Series 60 Platform ships with its own software development kit SDK (Series 60 SDK attached with Series 60 Platform), said Series 60 Platform builds/starts/runs on the Symbian OS 6.1 (Series 60 Platform attached with Symbian OS 6.1) – see Series 60-C++, page 6, sections 2-4.

Series 60-C++ further discloses Series 60 SDK provides tools to test and debug applications such as "Hello World" (e.g., pp. 10-11, section 5.2.2, attaching debugger to Symbian OS 6.1 to debug application "Hello World"; page 11: 6-11, "*Alternatively, to run the application through the debugger, press F5...*"; page 7, lines 13-16, "*...Open a command prompt and change to the drive that contains The Series 60 SDK...*", emphasis added).

(iii) "*loading the application into the hosting process*" (page 11, line 21).

As set forth in the previous Office Action, application "Hello World" has been successfully loaded in the Symbian OS 6.1 (hosting process) as disclosed in page 11, Figure 3, "Hello World" successfully loaded within Status Pane, Main Pane, and Control Pane; pp. 10-11, section 5.2.2, Build and Run from the IDE; and

\\Symbian\\6.1\\Series60\\Epoc32Ex\\Basics\\HelloWorld (page 7, line 16, emphasis added);

\\Symbian\\6.1\\Series60\\Epoc32\\Release\\wins\\udeb\\HelloWolrd.exe (page 7, lines 28-32, emphasis added);

Accordingly, the examiner respectfully maintains grounds of 35 USC §102(a) rejection over claims 1-5, 7-18, 20-26, and 28-38.

b) 35 USC §102(b) rejection as being anticipated by Bogle (US Patent No. 6,353,923), Remarks, page 12.

Claim 1 is the representative claim (Remarks, page 12, lines 15-16).

The Applicants asserted, "Bogle neither discloses nor suggests '*creating a hosting process not based on said application*' ..." (Remarks, page 12, line 11-12).

As set forth in the previous Office Action, paragraph 14, pp. 9-10, Bogle explicitly discloses *creating a hosting process not based on said application* (e.g., FIG. 4, col.10: 23-38, "*FIG. 4 illustrates an example of an active debugging environment 400 in block diagram form based on the standard object interface example 200 of FIG. 2. In the active debugging environment 400 example, the first host process 220 contains the*

application 421 that is the debugging target although any application in one of the host processes 220, 230, or 250 can be the debugging target if desired. For example, the host process 250 might include an Internet web page application on an Internet server 202, and the host process 220 might include an Internet browser application under development on an end user's local machine 201. The Internet browser application under development would be the debugging target so that the application developer can watch what is happening as the browser interacts with the remote web page and exercises various features and controls of the web page", emphasis added).

Accordingly, the examiner respectfully maintains grounds of 35 USC §102(b) rejection over claims 1, 13, 22, and 34.

Claim Rejections – 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

9. Claims 1-5, 7-18, 20-26, and 28-38 are rejected under 35 U.S.C. 102(a) as being anticipated by Series 60-C++ (art of record, "Introduction to Series 60 Applications for C++ Developers", Version 1.0, Nokia Corporation, August 2002).

Claim 1:

Series 60-C++ discloses *a method for debugging an application operating within a runtime environment, said method comprising:*

creating a hosting process not based on said application (e.g., page 6, section 3, Symbian OS 6.1 not based on "Hello World" applications; page 7, lines 16 and 28-32);

starting said runtime environment in the hosting process (e.g., page 6, section 2, Series 60 Platform in the hosting process Symbian OS 6.1; page 7, lines 16 and 30);

attaching a debugger to said hosting process (e.g., page 6, section 4, Series 60 C++ Software Development Kit DSK, which provide tools to test and debug "Hello World" applications; page 11: 6-11; page 7, lines 13-16);

subsequent to said acts of creating, starting, and attaching, receiving a request to debug the application (e.g., page 11: 6-11, press F5 to run the "Hello World" applications through the debugger); and

in response to receiving said request, loading the application into the hosting process (e.g., pp 10-11, section 5.2.2 Build and run from the IDE; page 11, Figure 3, loading successfully "Hello World"; page 7, lines 16 and 28-32).

Claim 2:

The rejection of claim 1 is incorporated. Series 60-C++ also discloses *preloading selected assemblies into an application domain prior to receiving said request to debug (e.g., page 10: 9-16).*

Claim 3:

The rejection of claim 1 is incorporated. Series 60-C++ also discloses *said runtime environment comprises a hosted runtime environment (e.g., page 10: 1-9).*

Claim 4:

The rejection of claim 1 is incorporated. Series 60-C++ also discloses *said runtime environment comprises a script interpreter (e.g., page 16: 21-26).*

Claim 5:

The rejection of claim 1 is incorporated. Series 60-C++ also discloses *said runtime environment comprises an intermediate language interpreter (e.g., page 18: 26-32).*

Claim 7:

The rejection of claim 1 is incorporated. Series 60-C++ also discloses *creating an application domain within said hosting process for debugging said application* (e.g., page 8: 10-14).

Claim 8:

The rejection of claim 1 is incorporated. Series 60-C++ also discloses *configuring said debugger to a hosting process mode for debugging said application via said hosting process* (e.g., pp. 7-8, section 5.1.1, set up, run, and test "Hello World" from the command line; section 5.1.2, set up, run, and test "Hello World" from the IDE").

Claim 9:

The rejection of claim 1 is incorporated. Series 60-C++ also discloses *said runtime environment is hosted by said hosting process* (e.g., page 6, sections 1-3, Series 60 Platform is hosted by Symbian OS 6.1).

Claim 10:

The rejection of claim 1 is incorporated. Series 60-C++ also discloses *said application is developed in a design-time environment* (e.g., page 8: 3-5).

Claim 11:

The rejection of intervening claim 10 is incorporated. Series 60-C++ also discloses *said design-time environment is a rapid application design environment* (e.g., page 6, section 4, Series 60 C++ Software Development Kit SDK).

Claim 12:

The rejection of claim 1 is incorporated. Series 60-C++ also discloses *performance of said acts of creating, starting and attaching prior to said act of receiving is not perceived by a user* (e.g., page 6, section 4, tools and Microsoft Windows-hosted emulator to assist developers to develop, run, and test/debug C++ applications).

Claim 13:

Series 60-C++ discloses *a system for debugging an application operating within a runtime environment, said system comprising:*

a hosting process for: preparing a hosting environment in which said application is debuggable (e.g., page 6, section 3, Symbian OS 6.1 and "Hello World" applications); and

receiving a request to debug said application, wherein said hosting process is independent of said application (e.g., page 11: 6-11, press F5 to run "Hello World" applications through the debugger);

a debugger for debugging said application via said hosting process (e.g., page 6, section 4, Series 60 C++ Software Development Kit SDK, which provides tools to test and debug "Hello World" applications); and

a design-time environment for hosting a debugger, wherein said hosting process is created, said runtime environment is started within said hosting process (e.g., page 6, section 4; page 8: 3-14, Microsoft Visual C++ 6.0 IDE), and

said debugger is attached to said hosting process before said request to debug said application is received by said design-time environment (e.g., page 11: 6-11).

Claim 14:

The rejection of claim 13 is incorporated. Series 60-C++ also discloses *an application domain is created within said hosting process for debugging said application (e.g., page 10: 9-16).*

Claim 15:

The rejection of intervening claim 14 is incorporated. Series 60-C++ also discloses *selected assemblies are preloaded into said application domain prior to receiving said request to debug (e.g., page 10: 9-16).*

Claims 16-18 and 20-21:

The rejection of claim 13 is incorporated. Claims 16-18 and 20-21 recite the same limitations as those of claims 3-5 and 10-12, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claims, it also teaches all of the limitations of claims 16-18 and 20-21.

Claims 22-26 and 28-33:

Claims 22-26 and 28-33 are computer readable storage medium versions, which recite the same limitations as those of claims 1-5 and 7-12, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claims, it also teaches all of the limitations of claims 22-26 and 28-33.

Claim 34:

Series 60-C++ discloses *a software development system comprising:*

a development tool that provides a user environment and interface to develop an application (e.g., page 6, section 4; page 8: 3-14, Microsoft Visual C++ 6.0 IDE),

said user environment and interface including a user-operable control to begin debugging (e.g., page 11: 6-11); and

a debugging preparation module that: creates a hosting process not based on said application (e.g., page 6, section 3, Symbian OS 6.1; page 7: 31 – page 8: 10, Figure 1, Series 60 emulator);

starts, in the hosting process, a runtime environment under which said application is runnable (e.g., page 6, section 2, Series 60 Platform); and

attaches a debugger to said hosting process (e.g., page 6, section 4; page 11: 6-11);

said user-operable control causing said application to be loaded into the hosting process (e.g., pp. 10-11, section 5.2.2 Build and run from the IDE; page 11, Figure 3, loading successfully "Hello World").

Claims 35-38:

Claims 35-38 are software development system versions, which recite the same limitations as those of claims 20 and 16-18, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claims, it also teaches all of the limitations of claims 35-38.

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1, 13, 22, and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Bogle (art of record, US Patent No. 6,353,923).

Claim 1:

Bogle discloses *a method for debugging an application operating within a runtime environment, said method comprising:*

creating a hosting process not based on said application (e.g., FIG. 4, col.10: 23-38);

starting said runtime environment in the hosting process (e.g., e.g., FIG. 5, block 512 Generate Run Time Environment, col.12: 52-59);

attaching a debugger to said hosting process (e.g., e.g., FIG. 5, block 521 Establish Active Debugging Environment, col.12: 60 – col.13:10);

subsequent to said acts of creating, starting, and attaching, receiving a request to debug the application (e.g., e.g., FIG. 5, block 530, Run Virtual Application Under Debug Environment Control, col.13: 11-23); and

in response to receiving said request, loading the application into the hosting process (e.g., e.g., FIG. 5, block 550, Perform Debugging Operations, col.13: 24-30).

Claim 13:

Bogle discloses *a system for debugging an application operating within a runtime environment, said system comprising:*

a hosting process for: preparing a hosting environment in which said application is debuggable (e.g., FIG. 4, col.10: 23-38); and

receiving a request to debug said application, wherein said hosting process is independent of said application (e.g., FIG. 5, block 530, Run Virtual Application Under Debug Environment Control, col.13: 11-23);

a debugger for debugging said application via said hosting process (e.g., FIG. 5, block 521 Establish Active Debugging Environment, col.12: 60 – col.13:10); and

a design-time environment for hosting a debugger, wherein said hosting process is created, said runtime environment is started within said hosting process (e.g., FIG. 4, computing device 201, col.10: 30-34; Active Debugger IDE 410, col.10: 57-64), and

said debugger is attached to said hosting process before said request to debug said application is received by said design-time environment (e.g., FIG. 5, block 521 Establish Active Debugging Environment, col.12: 60 – col.13:10).

Claim 22:

Claim 22 is a computer readable storage medium version, which recites the same limitations as those of claims 1, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claims, it also teaches all of the limitations of claim 22.

Claim 34:

Bogle discloses *a software development system comprising:*

a development tool that provides a user environment and interface to develop an application (e.g., Active Debugger IDE 410, col.10: 57-64),

said user environment and interface including a user-operable control to begin debugging (e.g., FIG. 4, computing device 201, col.10: 30-34; Active Debugger IDE 410, col.10: 57-64); and

a debugging preparation module that: creates a hosting process not based on said application (e.g., FIG. 4, col.10: 23-38);

starts, in the hosting process, a runtime environment under which said application is runnable (e.g., FIG. 5, block 512 Generate Run Time Environment, col.12: 52-59); and

attaches a debugger to said hosting process (e.g., FIG. 5, block 521 Establish Active Debugging Environment, col.12: 60 – col.13:10);

said user-operable control causing said application to be loaded into the hosting process (e.g., FIG. 5, block 550, Perform Debugging Operations, col.13: 24-30).

Conclusion

12. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

13. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone is (571) 272 8570. The examiner can normally be reached on Monday, Tuesday, Thursday, and Friday from 6:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.


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The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Dao



TUAN DAM
SUPERVISORY PATENT EXAMINER